

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) An information distribution system wherein a terminal apparatus, a display information transmitting apparatus, and a schedule transmitting apparatus are interconnected over a network, wherein:

said display information transmitting apparatus comprises:

display information transmitting means for transmitting display information to the terminal apparatus upon reception of a display information transmission request transmitted from the terminal apparatus; and

transmitting display information storage means for storing the display information,

said schedule transmitting apparatus comprises:

transmission schedule storage means for storing a schedule table that lists a plurality of schedules comprising a set of a display start time that specifies a time of day to start displaying the display information, an address that identifies the display information, a display end time that specifies a time of day to end displaying the display information and/or a display period that specifies a time duration for displaying the display information;

selecting means for selecting a first schedule by retrieving, from the schedule table, a schedule whose display start time is close to a time of day received from the terminal apparatus, upon reception of the time of day from the terminal apparatus; and

schedule transmitting means for transmitting the first schedule selected by the selecting means to the terminal apparatus; and

said terminal apparatus comprises:

display means for displaying the display information;

an internal clock for giving a lapse of time;

screen saver for displaying a given image on the display means when an operation to the terminal apparatus by a user is suspended for a certain period of time or longer;

time of day transmitting means for transmitting the time of day given by the internal clock to the schedule transmitting apparatus when the given image is displayed on the display means and when the display end time is getting close;

schedule receiving means for receiving the first schedule from the schedule transmitting apparatus;

schedule storage means for storing the first schedule received by the schedule receiving means;

display information transmission request transmitting means for transmitting a display information transmission request to the display information transmitting apparatus with reference to the address listed in the first schedule when the time of day given by the internal clock reaches the display start time listed in the schedule stored in the schedule storage means;

display information receiving means for receiving the display information from the display information transmitting apparatus; and

display control means for displaying the display information received by the display information receiving means on the display means,

wherein the display information is capable of being updated by ~~a respective one of a plurality of updating apparatuses comprising a PC, a mobile phone, [[and]] or a Personal Digital Assistant[[.]], and~~

wherein the terminal apparatus periodically sends a schedule transmission request to the schedule transmitting apparatus to request latest schedule information.

2. (Previously Presented) The information distribution system as claimed in claim 1, wherein:

said terminal apparatus further comprises schedule rewriting means for rewriting the first schedule stored in said schedule storage means with a second schedule received by said schedule receiving means, when a different portion between the first schedule and the second schedule is determined by said terminal apparatus;

said time of day transmitting means transmits the time of day given by the internal clock to the schedule transmitting apparatus at a predetermined interval during the display period when said display information is displayed; and

said schedule rewriting means rewrites the first schedule with the second schedule, when a different portion between the first schedule and the second schedule is determined by said terminal apparatus at the time when the second schedule received by said schedule receiving means is transmitted from said schedule transmitting apparatus based on the time of day transmitted to said schedule transmitting apparatus at said predetermined interval.

3. (Previously Presented) The information distribution system as claimed in claim 2, wherein:

said schedule rewriting means rewrites the first schedule with the second schedule, when either said display end time or said display period is different determined by the terminal apparatus.

4. (Previously Presented) The information distribution system as claimed in claim 1, wherein: said terminal apparatus further comprises display information storage means for storing display information displayed on said display means.

5. (Previously Presented) The information distribution system as claimed in claim 1, further comprising:

schedule correcting means interconnected to said terminal apparatus, said schedule transmitting apparatus, and said display information transmitting means for correcting the schedule stored in said transmission schedule storage means or display information stored in said transmitting display information storage means.

6. (Previously Presented) The information distribution system as claimed in claim 1, wherein:

said display information is related to a television or radio program that is on the air during the display period when the display information is displayed on the display means.

7. (Previously Presented) The information distribution system as claimed in claim 1, wherein:

said display information transmitting means further comprises encryption means for encrypting said display information; and

said terminal apparatus further comprises decryption means for decrypting said encrypted display information encrypted by said encryption means.

8. (Previously Presented) The information distribution system as claimed in claim 1, wherein:

said terminal apparatus further comprises last display information transmitting means for transmitting to said display information transmitting apparatus the last display information designating the display information displayed at said display means when an operation by a user is carried out while displaying said last display information; and

said display information transmitting apparatus further comprises counting means for counting the transmissions of said display information and transmitting the count as another display information when the last display information is transmitted from said terminal apparatus.

9. (Previously Presented) The information distribution system as claimed in claim 1, wherein:

a plurality of schedule tables is stored in said transmission schedule storage means; and
said terminal apparatus further comprises schedule table selecting means for selecting a schedule table to which the schedule to be transmitted by said schedule transmitting apparatus belongs.

10. (Currently Amended) A terminal apparatus interconnected with a display information transmitting apparatus for transmitting display information and a schedule transmitting apparatus for transmitting a schedule over a network, comprising:

display means for displaying the display information;

an internal clock for giving a lapse of time;

a screen saver for displaying a given image on the display means when an operation to the terminal apparatus by a user is suspended for a certain period of time or longer;

time of day transmitting means for transmitting the time of day given by the internal clock to the schedule transmitting apparatus when the given image is displayed on the display means and when the time of day to end displaying the given image is close;

schedule receiving means for receiving a first schedule comprising a set of a display start time that specifies a time of day to start displaying the display information, an address that identifies the display information, a display end time that specifies a time of day to end displaying the display information and/or a display period that specifies a time duration required to display the display information;

schedule storage means for storing the first schedule received by the schedule receiving means;

display information transmission request transmitting means for transmitting a display information transmission request to the display information transmitting apparatus with reference to the address listed in the first schedule when the time of day given by the internal clock reaches the display start time listed in the first schedule stored in the schedule storage means;

display information receiving means for receiving the display information from the display information transmitting apparatus; and

display control means for displaying the display information received by the display information receiving means on the display means,

wherein the display information is capable of being updated by ~~a respective one of a plurality of updating apparatuses comprising a PC, a mobile phone~~[[, and]] or a Personal Digital Assistant[[.]], and

wherein the terminal apparatus periodically sends a schedule transmission request to the schedule transmitting apparatus to request latest schedule information.

11. (Previously Presented) The terminal apparatus as claimed in claim 10, wherein:

said terminal apparatus further comprises schedule rewriting means for rewriting the first schedule stored in said schedule storage means with a second schedule received by said schedule receiving means, when a different portion between the first schedule and the second schedule is determined by said terminal apparatus ;

said time of day transmitting means transmits the time of day given by the internal clock to the schedule transmitting apparatus at a predetermined interval during the display period when said display information is displayed; and

said schedule rewriting means rewrites said first schedule stored in said schedule storage means with the second schedule received by said schedule receiving means, when a different portion between the first schedule and the second schedule is determined by the terminal apparatus at the time when the second schedule received by said schedule receiving means is transmitted from said schedule transmitting apparatus based on the time of day transmitted to said schedule transmitting apparatus at said predetermined interval.

12. (Previously Presented) The terminal apparatus as claimed in claim 11, wherein:

said schedule rewriting means rewrites said first schedule stored in said schedule storage means with the second schedule received by said schedule receiving means, when either said display end time or said display period is different in case of comparing the second schedule received by said schedule receiving means with the first schedule stored in said schedule storage means.

13. (Previously Presented) The terminal apparatus as claimed in claim 10, further comprising:

display information storage means for storing display information displayed on said display means.

14. (Previously Presented) The terminal apparatus as claimed in claim 10, further comprising:

decryption means for decrypting said encrypted display information.

15. (Previously Presented) The terminal apparatus as claimed in claim 11, further comprising:

a last display information transmitting means for transmitting to said display information transmitting apparatus the last display information designating the display information displayed at said display means when an operation by a user is carried out while displaying said display information.

16. (Currently Amended) A schedule transmitting apparatus interconnected with a terminal apparatus and a display information transmitting apparatus for transmitting display information to the terminal apparatus over a network, comprising:

transmission schedule storage means for storing a schedule table that lists a plurality of schedules each of which is composed of a set of a display start time that specifies a time of day to start displaying the display information, a display end time that specifies a time of day to end displaying the display information, a display period that specifies a time duration required to display the display information on a display means mounted to the terminal apparatus and an address that identifies the display information;

retrieval means for retrieving, from the schedule table, a schedule display start time of which is close to a time of day transmitted from the terminal apparatus, upon reception of the time of day from the terminal apparatus; and

schedule transmitting means for transmitting the schedule retrieved by the retrieval means to the terminal apparatus,

wherein the display information is capable of being updated by ~~a respective one of a plurality of updating apparatuses comprising a PC, a mobile phone~~[[, and]] or a Personal Digital Assistant[[.]], and

wherein the terminal apparatus periodically sends a schedule transmission request to the schedule transmitting apparatus to request latest schedule information.

17. (Previously Presented) The schedule transmitting apparatus as claimed in claim 16, wherein:

said transmission schedule storage means stores a plurality of schedule tables.

18. (Currently Amended) A display information transmitting apparatus connected with a terminal apparatus over a network, comprising:

transmitting display information storage means for storing display information to be transmitted to the terminal apparatus; and

display information transmitting means for transmitting the display information stored in the transmitting display information storage means to the terminal apparatus upon reception of a display information transmission request transmitted from the terminal apparatus with reference to an address,

wherein the display information is capable of being updated by ~~a respective one of a plurality of updating apparatuses comprising a PC, a mobile phone[[, and]]~~ or a Personal Digital Assistant[[.]], and

wherein the terminal apparatus periodically sends a schedule transmission request to a schedule transmitting apparatus to request latest schedule information of the display information.

19. (Previously Presented) The display information transmitting apparatus as claimed in claim 18, further comprising:

encryption means for encrypting said display information.

20. (Previously Presented) The display information transmitting apparatus as claimed in claim 18, wherein:

said display information to be transmitted by said display information transmitting apparatus is related to a television or radio program that is on the air during a display period when the display information is displayed on the display means.

21. (Previously Presented) The display information transmitting apparatus as claimed in claim 18, further comprising:

counting means for counting transmissions of said display information and transmitting the count as another display information based on the last display information transmitted from said terminal apparatus based on the last display information designating the display information displayed on said display means.

22. (Currently Amended) An information distribution method adaptable to an information distribution system configured by interconnecting a terminal apparatus, a display information transmitting apparatus and a schedule transmitting apparatus over a network, comprising the steps of:

allowing the terminal apparatus to transmit a time of day given by an internal clock, which gives a lapse of time, to the schedule transmitting apparatus, while displaying a given image on display means when an operation to the terminal apparatus by a user is suspended for a certain period of time or longer ;

allowing the schedule transmitting apparatus to, upon reception of the time of day from the terminal apparatus, transmit a first schedule to the terminal apparatus by retrieving, from schedules comprising a set of a display start time that specifies a time of day to start displaying the display information, a display end time that specifies a time of day to end displaying the

display information, a display period that specifies a time duration required to display the display information and an address that identifies the display information, whose display start time is close to the time of day transmitted from the terminal apparatus;

allowing the terminal apparatus to, upon reception of the first schedule, store the first schedule in a recording medium, while transmitting a display information transmission request to the display information transmitting apparatus with reference to the address listed in the first schedule when the time of day given by the internal clock reaches the display start time listed in the first schedule stored in the recording medium;

allowing the display information transmitting apparatus to, upon reception of the display information transmission request, transmit the display information to the terminal apparatus; and

allowing the terminal apparatus to, upon reception of the display information from the display information transmitting apparatus, display the received display information on the display means,

wherein the display information is capable of being updated by ~~a respective one of a plurality of updating apparatuses comprising a PC, a mobile phone[[, and]]~~ or a Personal Digital Assistant[[.]], and

wherein the terminal apparatus periodically sends a schedule transmission request to the schedule transmitting apparatus to request latest schedule information.

23. (Previously Presented) The information distribution method as claimed in claim 22, wherein:

said terminal apparatus transmits the time of day given by the internal clock to the schedule transmitting apparatus at a predetermined interval during display period when said display information is displayed;

said schedule transmitting apparatus retrieves a second schedule by receiving the time of day transmitted by said terminal apparatus, and transmits to the terminal apparatus the second schedule which has a start time close to the time of day transmitted by said terminal apparatus; and

said terminal apparatus receives the second schedule transmitted by said schedule transmitting apparatus, and rewrites the first schedule stored in the recording medium with the second schedule, when a different portion between the first schedule and the second schedule is determined by the terminal apparatus.

24. (Previously Presented) The information distribution method as claimed in claim 23, wherein:

said terminal apparatus rewrites said first schedule stored in said recording medium with the second schedule, when either said display end time or said display time is different in case of comparing the second schedule with the first schedule stored in said recording medium.

25. (Previously Presented) The information distribution method as claimed in claim 22, wherein:

said terminal apparatus records to the recording medium the display information transmitted by said display information by said display information transmitting means.

26. (Previously Presented) The information distribution method as claimed in claim 22, further comprising:

schedule correcting means interconnected to said terminal apparatus, said schedule transmitting apparatus, and said display information transmitting means for correcting either the schedule to be transmitted by said schedule transmitting apparatus or display information to be transmitted by said display information transmitting apparatus.

27. (Previously Presented) The information distribution method as claimed in claim 22, wherein:

said display information is related to a television or radio program that is on the air during the display period when the display information is displayed on the display.

28. (Previously Presented) The information distribution method as claimed in claim 22, wherein:

said display information transmitting apparatus encrypts said display information; and
said terminal apparatus decrypts said encrypted display information.

29. (Previously Presented) The information distribution method as claimed in claim 22, wherein:

said terminal apparatus transmits to said display information transmitting apparatus the last display information designating display information displayed at said display means when an operation by a user is carried out while displaying said display information; and

said display information transmitting apparatus counts the transmissions of said display information and transmits the number as another display information based on the last display information transmitted from said terminal apparatus.

30. (Previously Presented) The information distribution method as claimed in claim 22, wherein:

a plurality of schedule tables is stored in the recording medium equipped to said schedule transmitting apparatus; and

said terminal apparatus selects a schedule table to which the first schedule to be transmitted by said schedule transmitting apparatus belongs.